

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,499	11/26/2003	Joem Volker Weiss	240152US0	6217
22850 7	590 11/15/2005		EXAM	INER
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			ROBERTSON, JEFFREY	
	1940 DUKE STREET ALEXANDRIA, VA 22314		ART UNIT	PAPER NUMBER
1122721112111	,		1712	
			DATE MAILED: 11/15/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

4/
,

	Application No.	Applicant(s)				
	10/721,499	WEISS ET AL.				
Office Action Summary	Examiner	Art Unit				
•	Jeffrey B. Robertson	1712				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 26 No.	Responsive to communication(s) filed on <u>26 November 2003</u> .					
2a) ☐ This action is FINAL . 2b) ☒ This	a)☐ This action is FINAL . 2b)☒ This action is non-final.					
3) Since this application is in condition for allowar	S) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	·					
4)⊠ Claim(s) <u>1-26</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-26</u> is/are rejected.						
	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)		·				
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite				
B) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 0204, 0404.	5) Notice of Informal P. 6) Other:	atent Application (PTO-152)				

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Keeffe et al. (U.S. Patent No. 6,184,311) in view of Weiss et al. (CA 2,356,006).

For claim 1, O'Keeffe teaches carboxylic acid functional polyester coating compositions containing both semicrystalline polyesters and amorphous polyesters in col. 2, lines 47-67. Note here that the acid value of both components is within the range set forth by applicant. O'Keeffe teaches that the amount of the polyester component ranges from between 40-98% and a curing agent component that makes up 2-60% of the composition, significantly overlapping applicant's ranges. Col. 6, lines 63-65. For claims 1, and 22-24, O'Keeffe teaches that the crosslinker may be polyhydroxylalkylamide and that the amount of reactive crosslinker groups per COOH groups is 0.6-1.6. Col. 7, line 45 through col. 8, line 3. Note here that the functionality of the polyhydroxylalklamide is at least 2 as evidenced by the formula set forth for the polyhydroxylamide. For claims 1 and 9, O'Keefe teaches that the amount of amorphous polyester is preferably 60-90% by weight and the amount of semi-crystalline polyester is 10-40% by weight. Col. 3, lines 1-5.

Application/Control Number: 10/721,499

Art Unit: 1712

For claims 10-14, O'Keeffe teaches the synthesis of an amorphous acid-functional polyester with a Tg of 68.5° C and an acid number of 35.51 prepared from isophthalic acid and neopentylglycol as the only polyol. Col. 13, Example 2a. Although, O'Keeffe does not expressly teach the melting point and functionality of the polyester, the examiner's position is that these properties would be inherent to the polyester as a result of the synthesis described in Example 2a.

For claim 15, in col. 11, Example 1a, O'Keeffe teaches the synthesis of a semi-crystalline polyester having an acid number of 33.1, a Tg of -12° C, and a melting point of 129° C. Although, O'Keeffe does not expressly teach the functionality of the polyester, the examiner's position is that this property would be inherent to the polyester as a result of the synthesis described in Example 1a.

For claims 16-21, O'Keeffe teaches that adipic acid, terephthalic acid, diethylene glycol, and 1,6-hexanediol are used to form the polyesters in col. 4, lines 3-42.

Although O'Keeffe does not expressly teach the percentages of the components as set forth in claims 16, 17, 19, and 20, O'Keeffe discloses that the through the choice of these components, the amount of crystallinity can be varied. Therefore, the amounts of these components are result effective variables that depend on the desired properties of the semi-crystalline polyesters and would have been obvious to one of ordinary skill in the art.

For claims 2 and 25, O'Keeffe teaches the addition of additives in col. 8, lines 58-63 and Example B.

Application/Control Number: 10/721,499

Art Unit: 1712

For claim 26, O'Keeffe teaches that the powder coating is applied to a substrate.

Col. 1. lines 8-20.

For claims 1 and 3-8, O'Keeffe fails to teach the presence of polyurea in the polyester powder coating compositions.

For claims 1 and 3-8, Weiss teaches that polyureas are applied to powder coatings. Page 1, lines 2-21. Here, Weiss teaches that the polyurea is formed from amines and isocyanates with a NCO/NH₂ ratio of 0.9-1.1. Weiss teaches that IPDI and IPD are used to form the polyurea.

O'Keeffe and Weiss both teach the preparation of powder coating materials. It would have been obvious to one of ordinary skill in the art at the time of the invention to add the polyureas of Weiss to the compositions of O'Keeffe. It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. . . . [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980)

Regarding claims 1 and 8, Weiss does not expressly teach the amount of polyurea added to the powder coatings. However, the amount of polyurea added would be a result effective variable depending on the degree of adhesion desired for the powder coating compositions.

Art Unit: 1712

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Geary et al. (U.S. Patent No. 4,801,680), Koenraadt et al. (U.S. Patent No. 6,100,349), and Moens et al. (U.S. Patent No. 6,660,398) are cited for general interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> rey B. Robertson Primary Examiner

Art Unit 1712